

**GELEST, INC.**

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **n-BUTYLCHLORODIHYDROXYTIN - SNB1933**

CHEMICAL NAME: n-BUTYLCHLORODIHYDROXYTIN

SYNONYMS: BUTYLSTANNOIC ACID, n-BUTYLTIN SESQUIOXIDE HYDRATE

CHEMICAL FAMILY: TIN COMPOUND

FORMULA: C<sub>4</sub>H<sub>11</sub>ClO<sub>2</sub>Sn

HMIS CODES HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV
n-BUTYLCHLORODIHYDROXYTIN	13355-96-9	>95	2 mg/m <sup>3</sup> as tin

**PHYSICAL DATA**

Boiling Point: NA  
Specific Gravity: 1.26  
Vapor Density: NA  
% volatiles: <3  
Molecular Weight: 245.27  
Appearance & Color: White powder, characteristic odor

Melting Point: 130-9°-dec  
Vapor Pressure: not determined  
Solubility in water: insoluble  
Evaporation rate: NA  
Other: NA

**FIRE & EXPLOSION DATA**

Flash Point, COC: >110°C (>230°F) Autoignition Temp.: not determined  
Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: Foam, Water spray, carbon dioxide.

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

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## ENVIRONMENTAL INFORMATION

Spill response: May be hazardous to aquatic life if released to open waters. Sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Dispose of as solid waste. Follow all chemical pollution control regulations. Alternately, collect solids for recovery and recycle of tin.

## HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis which may be delayed several hours. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of dust or particulates will irritate the respiratory tract.

Oral Toxicity - rat, LD50: >4000mg/kg

Chronic Toxicity: Exposure to dust or fumes of inorganic tin compounds is known to cause a benign pneumoniosis. (stannosis)

### SUGGESTED FIRST AID

**EYES:** In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

**SKIN:** Flush with water, then wash with soap and water.

**INHALATION:** Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

**INGESTION:** Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

## REACTIVITY DATA

Stability: Stable

Conditions to avoid: None with proper storage.

Hazardous decomposition products: Organic acid vapors, hydrogen chloride, tin oxides.

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## SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved dust and mist respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

## OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

## TRANSPORTATION

DOT SHIPPING NAME: CORROSIVE SOLIDS, N.O.S. (n-BUTYLCHLORODIHYDROXYTIN)

DOT HAZARD CLASS: 8

DOT LABEL: Corrosive

DOT ID No: UN1759

PG: III

Prepared by safety and environmental affairs

ISSUE DATE SNB1933: 1/20/04

SUPERSEDES: 9/30/03

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